

EPA Backs Trump-Era Nuclear Waste Cleanup Precedent, Sparking Criticism

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Over opposition from environmentalists, EPA is upholding a controversial precedent set by Trump-era Administrator Andrew Wheeler that will eliminate certain Clean Water Act (CWA) limits for radionuclides at an Energy Department (DOE) Superfund cleanup, but which sources say opens the door to skirting a broad set of standards at other sites.

By affirming Wheeler's 2020 decision, EPA "opens the door for DOE and other polluters across the country to manipulate radionuclide pollution standards in [Comprehensive Environmental Response, Compensation & Liability Act (CERCLA)] cleanups to suit their own financial goals," Amanda Garcia, an attorney with the Southern Environmental Law Center (SELC), says in response to questions from Inside EPA. "EPA's decision to affirm the Wheeler decision is inconsistent with CERCLA and the Clean Water Act, and allows polluters to disregard federal, state, and community environmental protection standards," she adds. "Andrew Wheeler is still in charge of EPA," one informed source says.

According to EPA, the agency has completed its more than year-long review of a 2020 radionuclide pollution decision by Wheeler that had settled a long-time dispute EPA and Tennessee regulators had with DOE over legal requirements governing a landfill set to receive radionuclide waste from DOE's Oak Ridge Reservation (ORR), TN. Wheeler's December 2020 decision, which was backed by DOE, overruled a determination by then-Region 4 Administrator Mary Walker that strict, technology-based effluent limits (TBELs) for discharges of radionuclide-containing wastewater should apply as enforceable applicable, relevant and appropriate requirements (ARARs) at ORR — setting a precedent for excluding certain CWA requirements at Superfund sites.

At Superfund cleanups, regulators determine which federal or more-stringent state ARARs apply to a remedial action. But SELC's Garcia has said that EPA's decision "sets a bad precedent" for how to apply CWA as an ARAR at Superfund sites. She has also said the decision cherry-picks which parts of the CWA are applicable at ORR, inviting a lot of room for interpretation. At issue are the wastewater discharge requirements for the so-called Environmental Management Disposal Facility (EMDF), which will receive CERCLA waste from ORR.

"The proposed remedy for EMDF being reviewed by EPA is consistent with the 'December 31, 2020 Radionuclide Pollution Decision issued by former EPA Administrator Andrew Wheeler,'" EPA says in response to a query. "That decision is no longer under review."

While EPA Administrator Michael Regan has yet to sign the record of decision (ROD) for the EMDF, the agency says DOE has signed it and it is now under review by EPA, with a decision expected shortly.

DOE in an Aug. 31 ROD submittal letter to EPA and Tennessee Department of Environment and Conservation (TDEC) asks for review and approval from the two agencies by Sept. 30.

Environmental Justice

The decision comes more than a year after EPA in June 2021 agreed, in response to environmentalists, to reconsider Wheeler's decision in light of Biden administration executive orders aimed at reviewing Trump-era environmental policies and bolstering environmental justice (EJ) protections.

But the decision is not surprising, as a May 4 preliminary agreement between EPA, DOE and TDEC governing cleanup requirements for wastewater discharges containing radionuclides from the EMDF assumed continuation of Wheeler's decision.

The action though is drawing ire from environmentalists — both on the substance of the decision and because it kept the community in the dark on a final outcome, after SELC and other environmental groups pressed for the review. "EPA's failure to communicate its decision to uphold the Wheeler decision directly to the community groups who sought review continues a long-standing pattern of sidelining the community throughout the EMDF process," Garcia says. "The federal agencies have been flouting CERCLA's public participation requirements for years at this site."

The ROD DOE is asking EPA to now sign makes reference to EPA's review of the Wheeler decision being complete and upheld — which prompted SELC to write a Sept. 22 letter to Regan asking for an update and explanation for DOE's assertion in the ROD.

"Based on DOE's statement in the draft EMDF ROD, it appears that Administrator Regan has concluded his internal review of the Radionuclide Pollution Decision and has decided to retain and utilize the legally flawed and arbitrary decision of his predecessor Administrator Wheeler to allow high levels of radionuclide pollution to create a

Commented [AC1]: The CWA doesn't include limits for radionuclides (the CWA excludes AEA materials). This sentence implies that there are existing CWA limits for radionuclides and that those limits are now being eliminated.

Commented [AC2]: Again, this statement implies there are "radionuclide pollution standards", when in fact, CWA provides no such standards for AEA material. The only promulgated standards for radionuclides are a limited set of drinking water standards in the SDWA and NCR standards (which apply to operating/commercial nuclear operations, not contamination of nuclear processes).

Need legal input to round this out...

Commented [AC3]: That language was in an earlier draft of the ROD, and has been changed, per OGC advice, in the final version of the ROD.

Commented [HD4R3]: "The decision is no longer under review."

sacrifice zone in Bear Creek,” SELC says, noting this is the first indication to community groups that EPA concluded its review.

In addition, SELC and local community groups signed a Sept. 19 letter to a DOE Oak Ridge official calling out the department on procedural failures, saying it has evaded public review of the proposed landfill, violating both the purpose and intent of CERCLA. In particular, they say DOE should issue a revised proposed plan, given all of the information it released after the initial proposed plan, including the list of ARARs.

The ROD that EPA is now reviewing says the remedy will prevent local exposure to CERCLA waste, prevent adverse impacts to water resources and unacceptable exposure to ecological receptors by meeting chemical-, location-, and action-specific ARARs, and will prevent exposure that exceeds a human health risk of 10^{-4} to 10^{-6} excess lifetime cancer risk or hazard index of 1, as required by CERCLA.

The ROD says, consolidation of waste at EMDF will “result in minor risks to human health and the environment during the operational period through release of treated wastewater to surface water; however, the risk is controlled to within acceptable limits since the wastewater will be treated to remove the majority of contaminants per CWA ARARs,” the ROD says.

But if that risk is closer to 10^{-4} , it will in fact not meet the 10^{-5} risk-based water quality effluent limitations that remain as ARARs.

Inadequate Protections

While Wheeler agreed with Region 4 that water quality-based effluent limitations (WQBELs) should apply as cleanup standards for the wastewater discharges containing radionuclides, he rejected TBELs as well as the application of the state’s antidegradation policy to discharges of radionuclides from the site’s current and planned landfills, noting that the creek to which they would discharge to is “currently impaired due to [polychlorinated biphenyls] and mercury and is not an outstanding natural resource water.”

But the May preliminary agreement indicating EPA was planning to uphold Wheeler’s decision triggered concerns over the rejection of TBELs, as well as the rejection of the state’s antidegradation policy and the adoption of fish consumption rates — used to set health-based water quality standards — for the site that are lower than the default value EPA otherwise uses. Environmentalists earlier this year also called for updated fish consumption and demographic data at the site.

Garcia and others have said that Wheeler’s decision will not ensure adequate protections. For instance, an EPA source last May said that the Wheeler decision removes two of three requirements — TBELs and antidegradation standards — that DOE is supposed to apply to protect water quality and weakens the process for complying with the third standard, which are WQBELs. Garcia has said that the TBELs that are supposed to apply are very specific in what they require, with the water quality standards then used to fill in gaps.

On the fish consumption rates — considered crucial for protecting EJ communities — the ROD confirms earlier documentation that DOE will be assuming a daily fish ingestion rate of 17.5 grams per day (g/day) every day for 26 years for its fish tissue and surface water PRGs, which are intended to be protective of recreational use.

But that number is lower than EPA’s updated 2015 CWA human health water quality criteria of 22 g/day, which was changed from EPA’s prior level of 17.5 g/day, — Suzanne Yohannan ([[HYPERLINK "mailto:syohannan@iwpnews.com"](mailto:syohannan@iwpnews.com)])

Commented [AC5]: No. the fish tissue and instream PRGs for radionuclides protect surface water for recreational use, including fishing, consistent with TN designation. The PRGs are very low and within the CERCLA risk range. o “sacrifice zone.” The creek will be protected for recreational throughout the water body, including areas that are off limits to the public.

Commented [AC6]: The fish tissue and instream PRGs for radionuclides are set at 10^{-5} ILCR level, consistent with TN WQS.

Commented [AC7]: Just fwiw, Bear Creek isn’t impaired for radionuclides, so even if the state’s antideg policy was an ARAR, it would have no practical effect.

Commented [AC8]: Somewhat misleading. The current TN WQS are based on a fish consumption rate of 17.5g/day — same as used for the EMDF PRGs. EPA has revised its default from 17.5 g/day to 22 g/day, but that hasn’t been adopted by TN yet. The TN program is “approved/authorized” by EPA. All TN WQS (i.e., non rads) are based on 17.5 g/day.

Commented [AC9]: See above.